STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

Pre-Cast Concrete Products of Maine, Inc.	)	**Departmental**
Sagadahoc County	)	**Findings of Fact and Order**
Topsham, Maine	)	**Air Emission License**
A-875-71-C-R	)	

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Pre-Cast Concrete Products of Maine, Inc. (Pre-Cast) of Topsham, Maine has applied to renew their Air Emission License permitting the operation of a concrete batch plant.

B. Emission Equipment

Pre-Cast is requesting to include the following equipment in the facility's air emission license:

Process Equipment

Equipment	Production Rate	Pollution Control Equipment
Concrete Batch Plant (designated ORU-1)	60 Cubic yds/day	Baghouse

C. Application Classification

The application for Pre-Cast does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005).

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II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (last amended December 1, 2005). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Concrete Batch Plant ORU-1

Pre-Cast is currently licensed to operate a concrete batch plant, designated ORU-1, for concrete production at their Topsham, Maine concrete manufacturing facility. ORU-1 has a maximum process rate of 60-yd^3/day and was manufactured in 2007.

ORU-1 makes use of a new cement silo. The new cement silo utilizes a woven polyester filter cartridge baghouse for particulate control. Pre-cast also utilizes the cement silo from the old previously licensed batch plant to store fly ash for use in the concrete batching process. Cement and fly ash are transported from the silos, via two enclosed piping/auger assemblies, to the weigh hopper. Cement and fly ash are mixed in the weigh hopper and dropped into the mixer. Mixed concrete is then augured into one of two hoppers that act as temporary storage until the concrete is poured into molds.

To meet the requirements of BPT for control of particulate matter (PM) emissions, the cement silos and weigh hopper shall be vented through a baghouse maintained for 99% removal efficiency. Pre-Cast shall continue to abide by their established inspection, maintenance and repair programs for the ORU-1 baghouse and the old batch plant silo baghouse which will allow for routine periodic inspections of the baghouses. Pre-Cast shall continue to maintain a baghouse maintenance log recording the date of inspections, the results of inspections, the number and location of all bag failures as well as all routine maintenance. The maintenance log shall be located at the facility whenever the facility is in operation.

Visible emissions from the ORU-1 baghouse and the old batch plant silo baghouse shall each be limited to 10% opacity on a six-minute block average, except for no more than 1 six-minute block in any one-hour period. Pre-Cast shall take corrective action if visible emissions from the baghouses exceed 5% opacity.

All components of the concrete batch plant shall be maintained so as to prevent PM leaks. Fugitive visible emissions from concrete batching operations shall not exceed 20% opacity except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations, which exceed 20% in any one-hour.

C. Parts Degreaser

Pre-Cast makes use of a 20-gallon parts degreaser unit. The degreaser unit was installed in 2003 and uses Super Agitene 141 solvent as the cleaning medium. Pre-Cast currently changes the cleaning solvent twice per year.

Pre-Cast shall maintain a record of Super Agitene 141 solvent use that shall include the amount of solvent added to the degreaser unit and the dates that the solvent was added. The record shall be maintained on a monthly and a twelve-month rolling total basis. For purposes of record keeping, the amount of solvent used shall be considered as the difference between the amount of solvent added and the amount of solvent removed.

In accordance with Maine's rule *Solvent Degreasers*, 06-096 CMR 130, Section 1(B), the following are exempt from the requirements of 06-096 CMR 130:

(1) A solvent cleaner using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mm Hg, or less, at 20° C (68° F);

(2) Wipe cleaning; and

(3) Cold cleaning machines using solvents containing less than or equal to 5% VOCs by weight.

If, in the future, Pre-Cast switches to a solvent that contains less than 5% VOC for use in the parts washers, to satisfy record keeping requirements Pre-Cast need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at the Topsham facility.

1. In accordance with Maine's rule *Solvent Degreasers*, 06-096 CMR 130, Section 3(A) and (B), Pre-Cast shall be subject to the following compliance standards:

A. Immersion cold cleaning machines shall have a freeboard ratio of 0.75 or greater unless the machines are equipped with covers that are kept closed except when parts are being placed into or being removed from the machine.

B. Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:

(1) Have a permanent, conspicuous label summarizing the operating requirements in Subsection 3 below.

(2) Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches shall constitute an acceptable cover.

(3) Cold cleaning machines shall be operated in accordance with the following procedures:

(a) Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container;

(b) Cleaned parts shall be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cold cleaning machine;

(c) Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray at a pressure that does not exceed 10 pounds per square inch gauge (psig);

(d) The owner or operator shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip;

(e) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the cold cleaning machine;

(f) When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used;

(g) Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately, and the wipe rags or other sorbent material shall be immediately stored in covered containers for disposal or recycling;

(h) Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and

(i) The owner or operator shall ensure that the solvent level does not exceed the fill line.

D. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations, which exceed 20% in any one-hour.

III. AMBIENT AIR QUALITY ANALYSIS

According to the *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 1, 2005), the level of air quality analyses required for a minor source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. Based on the total facility emissions, Pre-Cast is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

Pre-Cast Concrete Products of Maine, Inc.	)	**Departmental**
Sagadahoc County	)	**Findings of Fact and Order**
Topsham, Maine	)	**Air Emission License**
A-875-71-C-R	**6**	

The Department hereby grants Air Emission License A-875-71-C-R, subject to the following conditions:

Severability: The invalidity or unenforceability of any provision, or part thereof, of this Air Emission License shall not affect the remainder of the provision or any other provisions. This Air Emission License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (Title 38 MRSA §347-C).

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 CMR 115. [06-096 CMR 115]

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

(i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or

b. pursuant to any other requirement of this license to perform stack testing.

(ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

(iii)submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

(i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

(ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(iii)the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions. [06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) Concrete Batch Plant ORU-1

A. Pre-Cast shall vent emissions from the concrete batch plant ORU-1 cement silo and the old batch plant silo through a baghouses maintained for 99% removal efficiency and maintain all components of the concrete batch plant so as to prevent emission leaks. [06-096 CMR 115, BPT]

B. Pre-Cast shall maintain a baghouse maintenance log recording the date and time of baghouse inspections, the results of inspections, the number and location of all bag failures as well as all routine maintenance. The maintenance log shall be located at the facility whenever the facility is in operation. [06-096 CMR 115, BPT]

C. Opacity from the concrete batch plant baghouse and the old batch plant silo each is limited to no greater than 10% opacity on a six-minute block average, except for no more than 1 six-minute block in any one-hour period. Pre-Cast shall take corrective action if visible emissions from the baghouses exceed 5% opacity. [06-096 CMR 101]

D. Fugitive particulate matter emissions from the concrete batching operation shall be controlled so as to prevent visible emissions in excess of 20% opacity, except for no more than 5-minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations, which exceed 20% in any one-hour. [06-096 CMR 101]

E. All components of the concrete batch plant shall be maintained so as to prevent PM leaks. [06-096 CMR 115, BPT]

(17) Parts Degreaser

A. Pre-Cast shall maintain a record of Super Agitene 141 solvent use that shall include the amount added to the degreaser unit and the dates that the solvent was added. The record shall be maintained on a monthly and twelve-month rolling total bases. For the purposes of record keeping, the amount of solvent used shall be considered as the difference between the amount of solvent added and the amount of solvent removed. [06-096 CMR 115, BPT]

B. In accordance with 06-096 CMR 130, Section 3A, Pre-Cast shall follow equipment and operational standards when making use of the facility's parts degreaser. [06-096 CMR 130]

C. Pre-Cast shall be subject to the following compliance standards:

1. Immersion cold cleaning machines shall have a freeboard ratio of 0.75 or greater unless the machines are equipped with covers that are kept closed except when parts are being placed into or being removed from the machine.

2. Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:

   a. Have a permanent, conspicuous label summarizing the operating requirements in Subsection c below;

   b. Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches shall constitute an acceptable cover;

   c. Cold cleaning machines shall be operated in accordance with the following procedures:

      1. Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container;

      2. Cleaned parts shall be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cold cleaning machine;

      3. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray at a pressure that does not exceed 10 pounds per square inch gauge (psig);

      4. The owner or operator shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip;

5. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the cold cleaning machine;

6. When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used;

7. Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately, and the wipe rags or other sorbent material shall be immediately stored in covered containers for disposal or recycling;

8. Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and

9. The owner or operator shall ensure that the solvent level does not exceed the fill line.

[06-096 CMR 130]

D. If, in the future, Pre-Cast switches to a solvent that contains less than 5% VOC for use in the parts washers, to satisfy record keeping requirements Pre-Cast need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at the Topsham facility.
[06-096 CMR 115, BPT, 06-096 CMR 130]

(18) Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations, which exceed 20% in any one-hour. [06-096 CMR 101]

(19) Pre-Cast shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (Title 38 MRSA §605-C).

(20) Pre-Cast shall keep a copy of this order on site during all periods when the facility is in operation, and have the operator(s) be familiar with the terms of this order. [06-096 CMR 115, BPT]

DONE AND DATED IN AUGUSTA, MAINE THIS 3rd DAY OF December 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Brooks for
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

The term of this Order shall be for five (5) years from the above signature date.

Date of initial receipt of application: **September 9, 2008**
Date of application acceptance: **October 6, 2008**

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Peter G. Carleton, Bureau of Air Quality